

AMENDMENTS TO THE ABSTRACT

Please REPLACE the abstract with the following:

-- A method for producing one or more coating on a displaceable substrate in a vacuum chamber with the aid of a residual gas, by means of a sputtering device said coating being formed from at least two constituents, whereby a sputtering material of the sputtering device constitutes at least one first constituent and a reactive component of the residual gas constitutes a second constituent. The method comprises the following steps: reactive deposition of a coating on the substrate by the addition of a reactive component, with a predetermined stoichiometric deficit of the reactive component in a zone of the sputtering device; displacement of the substrate with the deposited coating into the vicinity of a plasma source, which is located in the vacuum chamber at a predetermined distance from the sputtering device; modification of the structure and/or stoichiometry of the coating by the action of the plasma of the plasma source, preferably by the addition of a predetermined quantity of the reactive component, to reduce the optical loss of the coating. The aim of the invention is to reduce the optical loss of the multilayer coating to below a predetermined value in a zone of the second coating adjoining the first coating. To achieve this, an interface is created with a thickness d_1 and a value for the deficit of the reactive component DEF that is less than a value DEF_1 .--